

Interchange	Cost Estimate
Rocker 1	\$ 2,375,000
Mainline 1	\$ 1,905,440
West Butte 1	\$ 11,545,324
West Butte 3	\$ 15,604,142
Mainline 2	\$ 28,500,000
Excelsior 1	\$ 3,250,000
Montana 1	\$ 1,750,000
Montana 2	\$ 2,375,000
Harrison 1	\$ 24,090,650
Harrison 2	\$ 18,502,775
Harrison 20	\$ 10,750,000
Harrison 21	\$ 1,750,000
Harrison 22	\$ 7,625,000
Harrison 23	\$ 4,875,000
East Butte 2	\$ 3,250,000
East Butte 3	\$ 38,514,820
Continental 2	\$ 1,750,000

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Rocker - Option 1

Description: Roundabouts at ramp terminals to combine ramps and frontage roads

By: NLB

Conceptual Cost Estimate

DRAFT 06/20/08

OPTION COSTS						
Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	0	SF	\$250	\$0		
Bridge - Steel	0	SF	\$350	\$0		
Asphalt Pavement (8")	6,045	TON	\$80	\$483,600		
Aggregate Base Course (16")	6,106	CY	\$25	\$152,650		
Curb and Gutter	2,802	LF	\$20	\$56,040		
Sidewalk	5,370	SF	\$50	\$268,500		
Earthwork	9,159	CY	\$15	\$137,385		
Retaining Walls	0	SF	\$50	\$0		
Overhead Signs	0	EA	\$50,000	\$0		
					\$1,098,175	
Intersection Improvements						
Minor rework areas	0	LS	\$50,000	\$0		
Major Drainage Items	0	LS	\$25,000	\$0		
Traffic Signal	0	LS	\$250,000	\$0		
					\$0	
Subtotal Section Core Items					\$1,098,175	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			3%		\$32,945	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$21,964	
Landscape			10%		\$109,818	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$21,964	
Traffic Control			10%		\$109,818	
Mobilization & Misc.			10%		\$109,818	
Total			37%		\$406,325	
Subtotal Section Miscellaneous Items					\$1,504,500	
Contingencies			25%		\$400,000	
CONSTRUCTION COST					\$1,900,000	
TOTAL SECTION PROJECT COST						
Construction Cost				\$1,900,000		
Right of Way Acquisition	0	SF	\$5	\$0		\$5 for urban areas, \$2 for agricultural
Preliminary Engineering - 10% of Construction				\$190,000		
Construction Engineering - 15% of Construction				\$285,000		
TOTAL OPTION R-1 COSTS				\$2,375,000		

Mainline 1**Description:** Lengthen EB acceleration lane length

By: NLB

Conceptual Cost Estimate**DRAFT 06/20/08**

OPTION COSTS						
Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	0	SF	\$250	\$0		
Bridge - Steel	0	SF	\$350	\$0		
Asphalt Pavement (8")	4,960	TON	\$80	\$396,800		
Aggregate Base Course (16")	5,010	CY	\$25	\$125,250		
Curb and Gutter	0	LF	\$20	\$0		
Sidewalk	0	SF	\$50	\$0		
Earthwork	22,545	CY	\$15	\$338,175		
Retaining Walls	0	SF	\$50	\$0		
Overhead Signs	0	EA	\$50,000	\$0		
					\$860,225	
Intersection Improvements						
Minor rework areas	0	LS	\$50,000	\$0		
Major Drainage Items	0	LS	\$25,000	\$0		
Traffic Signal	0	LS	\$250,000	\$0		
					\$0	
Subtotal Section Core Items					\$860,225	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			3%		\$25,807	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$17,205	
Landscape			2%		\$17,205	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$17,205	
Traffic Control			10%		\$86,023	
Mobilization & Misc.			10%		\$86,023	
Total			29%		\$249,465	
Subtotal Section Miscellaneous Items					\$1,109,690	
Contingencies			25%		\$300,000	
CONSTRUCTION COST					\$1,400,000	
TOTAL SECTION PROJECT COST						
Construction Cost				\$1,400,000		
Right of Way Acquisition	77,720	SF	\$2	\$155,440		\$5 for urban areas, \$2 for agricultural
Preliminary Engineering - 10% of Construction				\$140,000		
Construction Engineering - 15% of Construction				\$210,000		
TOTAL OPTION M-1 COSTS				\$1,905,440		

West Butte - Option 1**Description:** Relocate WB off-ramp to a right side exit

By: NLB

Conceptual Cost Estimate**DRAFT 06/20/08****OPTION COSTS**

Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	4,088	SF	\$250	\$1,022,000		
Bridge - Steel	0	SF	\$350	\$0		
Asphalt Pavement (8")	6,952	TON	\$80	\$556,160		
Aggregate Base Course (16")	7,023	CY	\$25	\$175,575		
Curb and Gutter	0	LF	\$15	\$0		
Sidewalk	0	SF	\$50	\$0		
Earthwork	258,337	CY	\$12	\$3,100,038		
Retaining Walls	8,887	SF	\$50	\$444,350		
Overhead Signs	2	EA	\$50,000	\$100,000		
					\$5,398,123	
Intersection Improvements						
Minor rework areas	0	LS	\$50,000	\$0		
Major Drainage Items	0	LS	\$25,000	\$0		
Traffic Signal	0	LS	\$250,000	\$0		
					\$0	
Subtotal Section Core Items					\$5,398,123	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			10%		\$539,812	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$107,962	
Landscape			2%		\$107,962	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$107,962	
Traffic Control			10%		\$539,812	
Mobilization & Misc.			10%		\$539,812	
Total			36%		\$1,943,324	
Subtotal Section Miscellaneous Items					\$7,341,448	
Contingencies			25%		\$1,800,000	
CONSTRUCTION COST					\$9,100,000	
TOTAL SECTION PROJECT COST						
Construction Cost				\$9,100,000		
Right of Way Acquisition	85,162	SF	\$2	\$170,324		\$5 for urban areas, \$2 for agricultural
Preliminary Engineering - 10% of Construction				\$910,000		
Construction Engineering - 15% of Construction				\$1,365,000		
TOTAL OPTION WB-1 COSTS				\$11,545,324		

West Butte - Option 3

Description: Diamond interchange with reclassified I-115

By: NLB

Conceptual Cost Estimate

DRAFT 06/20/08

OPTION COSTS						
Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	11,368	SF	\$250	\$2,842,000		
Bridge - Steel	0	SF	\$350	\$0		
Asphalt Pavement (8")	16,691	TON	\$80	\$1,335,280		
Aggregate Base Course (16")	16,860	CY	\$25	\$421,500		
Curb and Gutter	0	LF	\$15	\$0		
Sidewalk	0	SF	\$50	\$0		
Earthwork	137,869	CY	\$12	\$1,654,428		
Retaining Walls	9,000	SF	\$50	\$450,000		
Overhead Signs	3	EA	\$50,000	\$150,000		
					\$6,853,208	
Intersection Improvements						
Minor rework areas	0	LS	\$50,000	\$0		
Major Drainage Items	2	LS	\$25,000	\$50,000		
Traffic Signal	0	LS	\$250,000	\$0		
					\$50,000	
Subtotal Section Core Items					\$6,903,208	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			10%		\$690,321	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$138,064	
Landscape			2%		\$138,064	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$138,064	
Traffic Control			10%		\$690,321	
Mobilization & Misc.			10%		\$690,321	
Total			36%		\$2,485,155	
Subtotal Section Miscellaneous Items					\$9,388,363	
Contingencies			25%		\$2,300,000	
CONSTRUCTION COST					\$11,700,000	
TOTAL SECTION PROJECT COST						
Construction Cost				\$11,700,000		
Right of Way Acquisition	489,571	SF	\$2	\$979,142		\$5 for urban areas, \$2 for agricultural
Preliminary Engineering - 10% of Construction				\$1,170,000		
Construction Engineering - 15% of Construction				\$1,755,000		
TOTAL OPTION WB-3 COSTS				\$15,604,142		

Mainline 2

Description: Bridge replacement and curve widening
Conceptual Cost Estimate

By: NLB

DRAFT 06/20/08

OPTION COSTS						
Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	57,716	SF	\$225	\$12,986,100		
Bridge - Steel	0	SF	\$350	\$0		
Asphalt Pavement (8")	3,496	TON	\$80	\$279,680		
Aggregate Base Course (16")	3,532	CY	\$25	\$88,300		
Curb and Gutter	0	LF	\$15	\$0		
Sidewalk	0	SF	\$50	\$0		
Earthwork	5,297	CY	\$12	\$63,564		
Retaining Walls	0	SF	\$50	\$0		
Overhead Signs	0	EA	\$50,000	\$0		
					\$13,417,644	
Intersection Improvements						
Minor rework areas	0	LS	\$50,000	\$0		
Major Drainage Items	0	LS	\$25,000	\$0		
Traffic Signal	0	LS	\$250,000	\$0		
					\$0	
Subtotal Section Core Items					\$13,417,644	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			10%		\$1,341,764	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$268,353	
Landscape			2%		\$268,353	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$268,353	
Traffic Control			10%		\$1,341,764	
Mobilization & Misc.			10%		\$1,341,764	
Total			36%		\$4,830,352	
Subtotal Section Miscellaneous Items					\$18,247,996	
Contingencies			25%		\$4,600,000	
CONSTRUCTION COST					\$22,800,000	
TOTAL SECTION PROJECT COST						
Construction Cost				\$22,800,000		
Right of Way Acquisition	0	SF	\$2	\$0		\$5 for urban areas, \$2 for agricultural
Preliminary Engineering - 10% of Construction				\$2,280,000		
Construction Engineering - 15% of Construction				\$3,420,000		
TOTAL OPTION WB-3 COSTS				\$28,500,000		

Excelsior - Option 1**Description:** Extend acceleration/deceleration length on all ramps

By: NLB

Conceptual Cost Estimate**DRAFT 06/20/08**

OPTION COSTS						
Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	5,422	SF	\$250	\$1,355,500		
Bridge - Steel	0	SF	\$350	\$0		
Asphalt Pavement (8")	2,074	TON	\$80	\$165,920		
Aggregate Base Course (16")	2,095	CY	\$25	\$52,375		
Curb and Gutter	0	LF	\$15	\$0		
Sidewalk	0	SF	\$50	\$0		
Earthwork	3,143	CY	\$12	\$37,716		
Retaining Walls	0	SF	\$50	\$0		
Overhead Signs	0	EA	\$50,000	\$0		
					\$1,611,511	
Intersection Improvements						
Minor rework areas	0	LS	\$50,000	\$0		
Major Drainage Items	0	LS	\$25,000	\$0		
Traffic Signal	0	LS	\$250,000	\$0		
					\$0	
Subtotal Section Core Items					\$1,611,511	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			3%		\$48,345	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$32,230	
Landscape			2%		\$32,230	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$32,230	
Traffic Control			10%		\$161,151	
Mobilization & Misc.			10%		\$161,151	
Total			29%		\$467,338	
Subtotal Section Miscellaneous Items					\$2,078,849	
Contingencies			25%		\$500,000	
CONSTRUCTION COST					\$2,600,000	
TOTAL SECTION PROJECT COST						
Construction Cost				\$2,600,000		
Right of Way Acquisition	0	SF	\$5	\$0		\$5 for urban areas, \$2 for agricultural
Preliminary Engineering - 10% of Construction				\$260,000		
Construction Engineering - 15% of Construction				\$390,000		
TOTAL OPTION EX-1 COSTS				\$3,250,000		

Montana - Option 1

Description: Signalize ramp terminals and modify frontage/ramp access

By: NLB

Conceptual Cost Estimate

DRAFT 06/20/08

OPTION COSTS						
Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	0	SF	\$250	\$0		
Bridge - Steel	0	SF	\$350	\$0		
Asphalt Pavement (8")	960	TON	\$80	\$76,800		
Aggregate Base Course (16")	969	CY	\$25	\$24,225		
Curb and Gutter	4,812	LF	\$15	\$72,180		
Sidewalk	0	SF	\$50	\$0		
Earthwork	1,454	CY	\$12	\$17,448		
Retaining Walls	0	SF	\$50	\$0		
Overhead Signs	0	EA	\$50,000	\$0		
					\$190,653	
Intersection Improvements						
Minor rework areas	2	LS	\$50,000	\$100,000		
Major Drainage Items	0	LS	\$25,000	\$0		
Traffic Signal	2	LS	\$250,000	\$500,000		
					\$600,000	
Subtotal Section Core Items					\$790,653	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			3%		\$23,720	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$15,813	
Landscape			10%		\$79,065	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$15,813	
Traffic Control			10%		\$79,065	
Mobilization & Misc.			10%		\$79,065	
Total			37%		\$292,542	
Subtotal Section Miscellaneous Items					\$1,083,195	
Contingencies			25%		\$300,000	
CONSTRUCTION COST					\$1,400,000	
TOTAL SECTION PROJECT COST						
Construction Cost				\$1,400,000		
Right of Way Acquisition	0	SF	\$5	\$0		\$5 for urban areas, \$2 for agricultural
Preliminary Engineering - 10% of Construction				\$140,000		
Construction Engineering - 15% of Construction				\$210,000		
TOTAL OPTION MT-1 COSTS				\$1,750,000		

Montana - Option 2

Description: Roundabouts at ramp terminals and shared frontage/ramp access

By: NLB

Conceptual Cost Estimate

DRAFT 06/20/08

OPTION COSTS						
Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	0	SF	\$250	\$0		
Bridge - Steel	0	SF	\$350	\$0		
Asphalt Pavement (8")	6,537	TON	\$80	\$522,960		
Aggregate Base Course (16")	6,603	CY	\$25	\$165,075		
Curb and Gutter	3,458	LF	\$15	\$51,870		
Sidewalk	0	SF	\$50	\$0		
Earthwork	9,904	CY	\$12	\$118,848		
Retaining Walls	0	SF	\$50	\$0		
Overhead Signs	0	EA	\$50,000	\$0		
					\$858,753	
Intersection Improvements						
Minor rework areas	4	LS	\$50,000	\$200,000		
Major Drainage Items	0	LS	\$25,000	\$0		
Traffic Signal	0	LS	\$250,000	\$0		
					\$200,000	
Subtotal Section Core Items					\$1,058,753	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			3%		\$31,763	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$21,175	
Landscape			10%		\$105,875	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$21,175	
Traffic Control			10%		\$105,875	
Mobilization & Misc.			10%		\$105,875	
Total			37%		\$391,739	
Subtotal Section Miscellaneous Items					\$1,450,492	
Contingencies			25%		\$400,000	
CONSTRUCTION COST					\$1,900,000	
TOTAL SECTION PROJECT COST						
Construction Cost	0	SF	\$5	\$1,900,000		\$5 for urban areas, \$2 for agricultural
Right of Way Acquisition				\$0		
Preliminary Engineering - 10% of Construction				\$190,000		
Construction Engineering - 15% of Construction				\$285,000		
TOTAL OPTION MT-2 COSTS				\$2,375,000		

Harrison - Option 1

Description: Reconstruct interchange as single point urban interchange (SPUI) and replace bridges

By: NLB

Conceptual Cost Estimate

DRAFT 06/20/08

OPTION COSTS						
Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	0	SF	\$250	\$0		
Bridge - Steel	15,800	SF	\$350	\$5,530,000		
Asphalt Pavement (8")	21,927	TON	\$80	\$1,754,160		
Aggregate Base Course (16")	22,149	CY	\$25	\$553,725		
Curb and Gutter	2,430	LF	\$15	\$36,450		
Sidewalk	7,151	SF	\$50	\$357,550		
Earthwork	73,932	CY	\$12	\$887,184		
Retaining Walls	14,400	SF	\$50	\$720,000		
Overhead Signs	4	EA	\$50,000	\$200,000		
					\$10,039,069	
Intersection Improvements						
Minor rework areas	0	LS	\$50,000	\$0		
Major Drainage Items	2	LS	\$25,000	\$50,000		
Traffic Signal	2	LS	\$250,000	\$500,000		
					\$550,000	
Subtotal Section Core Items					\$10,589,069	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			10%		\$1,058,907	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$211,781	
Landscape			10%		\$1,058,907	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$211,781	
Traffic Control			10%		\$1,058,907	
Mobilization & Misc.			10%		\$1,058,907	
Total			44%		\$4,659,190	
Subtotal Section Miscellaneous Items					\$15,248,259	
Contingencies			25%		\$3,800,000	
CONSTRUCTION COST					\$19,000,000	
TOTAL SECTION PROJECT COST						
Construction Cost				\$19,000,000		
Right of Way Acquisition	68,130	SF	\$5	\$340,650		\$5 for urban areas, \$2 for agricultural
Preliminary Engineering - 10% of Construction				\$1,900,000		
Construction Engineering - 15% of Construction				\$2,850,000		
TOTAL OPTION H-1 COSTS				\$24,090,650		

Harrison - Option 2

Description: Reconstruct interchange as tight diamond

By: NLB

Conceptual Cost Estimate

DRAFT 06/20/08

OPTION COSTS						
Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	11,732	SF	\$250	\$2,933,000		
Bridge - Steel	0	SF	\$350	\$0		
Asphalt Pavement (8")	21,146	TON	\$80	\$1,691,680		
Aggregate Base Course (16")	21,359	CY	\$25	\$533,975		
Curb and Gutter	1,010	LF	\$15	\$15,150		
Sidewalk	14,075	SF	\$50	\$703,750		
Earthwork	73,995	CY	\$12	\$887,940		
Retaining Walls	9,400	SF	\$50	\$470,000		
Overhead Signs	2	EA	\$50,000	\$100,000		
					\$7,335,495	
Intersection Improvements						
Minor rework areas	0	LS	\$50,000	\$0		
Major Drainage Items	2	LS	\$25,000	\$50,000		
Traffic Signal	3	LS	\$250,000	\$750,000		
					\$800,000	
Subtotal Section Core Items					\$8,135,495	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			10%		\$813,550	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$162,710	
Landscape			10%		\$813,550	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$162,710	
Traffic Control			10%		\$813,550	
Mobilization & Misc.			10%		\$813,550	
Total			44%		\$3,579,618	
Subtotal Section Miscellaneous Items					\$11,715,113	
Contingencies			25%		\$2,900,000	
CONSTRUCTION COST					\$14,600,000	
TOTAL SECTION PROJECT COST						
Construction Cost	50,555	SF	\$5	\$14,600,000		\$5 for urban areas, \$2 for agricultural
Right of Way Acquisition				\$252,775		
Preliminary Engineering - 10% of Construction				\$1,460,000		
Construction Engineering - 15% of Construction				\$2,190,000		
TOTAL OPTION H-2 COSTS				\$18,502,775		

Harrison - Option 20**Description:** Improve EB loop off-ramp WB loop on-ramp (combination of options H3 & H9)

By: NLB

Conceptual Cost Estimate**DRAFT 06/20/08****OPTION COSTS**

Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	15,100	SF	\$250	\$3,775,000		
Bridge - Steel	0	SF	\$350	\$0		
Asphalt Pavement (8")	5,128	TON	\$80	\$410,240		
Aggregate Base Course (16")	5,180	CY	\$25	\$129,500		
Curb and Gutter	180	LF	\$15	\$2,700		
Sidewalk	0	SF	\$50	\$0		
Earthwork	11,331	CY	\$12	\$135,972		
Retaining Walls	0	SF	\$50	\$0		
Overhead Signs	2	EA	\$50,000	\$100,000		
					\$4,553,412	
Intersection Improvements						
Minor rework areas	0	LS	\$50,000	\$0		
Major Drainage Items	0	LS	\$25,000	\$0		
Traffic Signal	1	LS	\$250,000	\$250,000		
					\$250,000	
Subtotal Section Core Items					\$4,803,412	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			10%		\$480,341	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$96,068	
Landscape			10%		\$480,341	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$96,068	
Traffic Control			10%		\$480,341	
Mobilization & Misc.			10%		\$480,341	
Total			44%		\$2,113,501	
Subtotal Section Miscellaneous Items					\$6,916,913	
Contingencies			25%		\$1,700,000	
CONSTRUCTION COST					\$8,600,000	
TOTAL SECTION PROJECT COST						
Construction Cost				\$8,600,000		
Right of Way Acquisition	0	SF	\$5	\$0		\$5 for urban areas, \$2 for agricultural
Preliminary Engineering - 10% of Construction				\$860,000		
Construction Engineering - 15% of Construction				\$1,290,000		
TOTAL OPTION H-20 COSTS (w/out EB mainline bridge)				\$10,750,000		
Option H3 Cost				\$4,730,000		
Option H9 Cost				\$3,870,000		

Harrison - Option 21

Description: Improve EB off-ramp and WB off-ramp (combination of options H4 & H6)

By: NLB

Conceptual Cost Estimate

DRAFT 06/20/08

OPTION COSTS						
Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	0	SF	\$250	\$0		
Bridge - Steel	0	SF	\$350	\$0		
Asphalt Pavement (8")	3,724	TON	\$80	\$297,920		
Aggregate Base Course (16")	3,761	CY	\$25	\$94,025		
Curb and Gutter	80	LF	\$15	\$1,200		
Sidewalk	0	SF	\$50	\$0		
Earthwork	11,282	CY	\$12	\$135,384		
Retaining Walls	0	SF	\$50	\$0		
Overhead Signs	0	EA	\$50,000	\$0		
					\$528,529	
Intersection Improvements						
Minor rework areas	0	LS	\$50,000	\$0		
Major Drainage Items	0	LS	\$25,000	\$0		
Traffic Signal	1	LS	\$250,000	\$250,000		
					\$250,000	
Subtotal Section Core Items					\$778,529	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			3%		\$23,356	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$15,571	
Landscape			10%		\$77,853	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$15,571	
Traffic Control			10%		\$77,853	
Mobilization & Misc.			10%		\$77,853	
Total			37%		\$288,056	
Subtotal Section Miscellaneous Items					\$1,066,585	
Contingencies			25%		\$300,000	
CONSTRUCTION COST					\$1,400,000	
TOTAL SECTION PROJECT COST						
Construction Cost	0	SF	\$5	\$1,400,000		\$5 for urban areas, \$2 for agricultural
Right of Way Acquisition				\$0		
Preliminary Engineering - 10% of Construction				\$140,000		
Construction Engineering - 15% of Construction				\$210,000		
TOTAL OPTION H-21 COSTS				\$1,750,000		
Option H4 Cost				\$560,000		
Option H6 Cost				\$840,000		

Harrison - Option 22

Description: Improves EB loop off-ramp and WB off-ramp (combination of options H3 & H6)

By: NLB

Conceptual Cost Estimate

DRAFT 06/20/08

OPTION COSTS					
Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension
Quantifiable Items					
Bridge - Precast Concrete Girder	9,570	SF	\$250	\$2,392,500	
Bridge - Steel	0	SF	\$350	\$0	
Asphalt Pavement (8")	4,910	TON	\$80	\$392,800	
Aggregate Base Course (16")	4,959	CY	\$25	\$123,975	
Curb and Gutter	180	LF	\$15	\$2,700	
Sidewalk	0	SF	\$50	\$0	
Earthwork	14,876	CY	\$12	\$178,512	
Retaining Walls	0	SF	\$50	\$0	
Overhead Signs	1	EA	\$50,000	\$50,000	
					\$3,140,487
Intersection Improvements					
Minor rework areas	0	LS	\$50,000	\$0	
Major Drainage Items	0	LS	\$25,000	\$0	
Traffic Signal	1	LS	\$250,000	\$250,000	
					\$250,000
Subtotal Section Core Items					\$3,390,487
Miscellaneous Items as Percentages					
Removals, Resets & Adjustments			10%		\$339,049
Drainage & Erosion Control			2%		\$67,810
Landscape			10%		\$339,049
Signing, Striping			2%		\$67,810
Traffic Control			10%		\$339,049
Mobilization & Misc.			10%		\$339,049
Total			44%		\$1,491,814
Subtotal Section Miscellaneous Items					\$4,882,301
Contingencies			25%		\$1,200,000
CONSTRUCTION COST					\$6,100,000
TOTAL SECTION PROJECT COST					
Construction Cost				\$6,100,000	
Right of Way Acquisition	0	SF	\$5	\$0	
Preliminary Engineering - 10% of Construction				\$610,000	
Construction Engineering - 15% of Construction				\$915,000	
TOTAL OPTION H-22 COSTS				\$7,625,000	
Option H3 Cost				\$5,185,000	

Harrison - Option 23

Description: Improves EB off-ramp and WB loop on-ramp (combination of options H4 & H9)

By: NLB

Conceptual Cost Estimate

DRAFT 06/20/08

OPTION COSTS						
Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	5,530	SF	\$250	\$1,382,500		
Bridge - Steel	0	SF	\$350	\$0		
Asphalt Pavement (8")	3,943	TON	\$80	\$315,440		
Aggregate Base Course (16")	3,982	CY	\$25	\$99,550		
Curb and Gutter	100	LF	\$15	\$1,500		
Sidewalk	0	SF	\$50	\$0		
Earthwork	5,973	CY	\$12	\$71,676		
Retaining Walls	0	SF	\$50	\$0		
Overhead Signs	1	EA	\$50,000	\$50,000		
					\$1,920,666	
Intersection Improvements						
Minor rework areas	0	LS	\$50,000	\$0		
Major Drainage Items	0	LS	\$25,000	\$0		
Traffic Signal	1	LS	\$250,000	\$250,000		
					\$250,000	
Subtotal Section Core Items					\$2,170,666	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			10%		\$217,067	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$43,413	
Landscape			10%		\$217,067	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$43,413	
Traffic Control			10%		\$217,067	
Mobilization & Misc.			10%		\$217,067	
Total			44%		\$955,093	
Subtotal Section Miscellaneous Items					\$3,125,759	
Contingencies			25%		\$800,000	
CONSTRUCTION COST					\$3,900,000	
TOTAL SECTION PROJECT COST						
Construction Cost				\$3,900,000		
Right of Way Acquisition	0	SF	\$5	\$0		\$5 for urban areas, \$2 for agricultural
Preliminary Engineering - 10% of Construction				\$390,000		
Construction Engineering - 15% of Construction				\$585,000		
TOTAL OPTION H-23 COSTS				\$4,875,000		
Option H4 Cost				\$390,000		

East Butte - Option 2

Description: Lengthen EB to NB deceleration length and SB to EB acceleration length

By: NLB

Conceptual Cost Estimate

DRAFT 06/20/08

OPTION COSTS						
Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	3,471	SF	\$250	\$867,750		
Bridge - Steel	0	SF	\$350	\$0		
Asphalt Pavement (8")	1,871	TON	\$80	\$149,680		
Aggregate Base Course (16")	1,890	CY	\$25	\$47,250		
Curb and Gutter	0	LF	\$15	\$0		
Sidewalk	0	SF	\$50	\$0		
Earthwork	14,170	CY	\$12	\$170,040		
Retaining Walls	0	SF	\$50	\$0		
Overhead Signs	1	EA	\$50,000	\$50,000		
					\$1,284,720	
Intersection Improvements						
Minor rework areas	0	LS	\$50,000	\$0		
Major Drainage Items	0	LS	\$25,000	\$0		
Traffic Signal	1	LS	\$250,000	\$250,000		Speed Reduction System
					\$250,000	
Subtotal Section Core Items					\$1,534,720	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			10%		\$153,472	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$30,694	
Landscape			2%		\$30,694	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$30,694	
Traffic Control			10%		\$153,472	
Mobilization & Misc.			10%		\$153,472	
Total			36%		\$552,499	
Subtotal Section Miscellaneous Items					\$2,087,219	
Contingencies			25%		\$500,000	
CONSTRUCTION COST					\$2,600,000	
TOTAL SECTION PROJECT COST						
Construction Cost	0	SF	\$5	\$2,600,000		\$5 for urban areas, \$2 for agricultural
Right of Way Acquisition				\$0		
Preliminary Engineering - 10% of Construction				\$260,000		
Construction Engineering - 15% of Construction				\$390,000		
TOTAL OPTION EB-2 COSTS				\$3,250,000		

East Butte - Option 3

Description: Reconstruct interchange to high speed standards

By: NLB

Conceptual Cost Estimate

DRAFT 06/20/08

OPTION COSTS						
Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	15,290	SF	\$250	\$3,822,500		
Bridge - Steel	21,558	SF	\$350	\$7,545,300		
Asphalt Pavement (8")	25,618	TON	\$80	\$2,049,440		
Aggregate Base Course (16")	25,877	CY	\$25	\$646,925		
Curb and Gutter	0	LF	\$15	\$0		
Sidewalk	0	SF	\$50	\$0		
Earthwork	118,737	CY	\$12	\$1,424,844		
Retaining Walls	30,000	SF	\$50	\$1,500,000		
Overhead Signs	6	EA	\$50,000	\$300,000		
					\$17,289,009	
Intersection Improvements						
Minor rework areas	0	LS	\$50,000	\$0		
Major Drainage Items	0	LS	\$25,000	\$0		
Traffic Signal	0	LS	\$250,000	\$0		
					\$0	
Subtotal Section Core Items					\$17,289,009	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			10%		\$1,728,901	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$345,780	
Landscape			2%		\$345,780	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$345,780	
Traffic Control			10%		\$1,728,901	
Mobilization & Misc.			10%		\$1,728,901	
Total			36%		\$6,224,043	
Subtotal Section Miscellaneous Items					\$23,513,052	
Contingencies			25%		\$5,900,000	
CONSTRUCTION COST					\$29,400,000	
TOTAL SECTION PROJECT COST						
Construction Cost				\$29,400,000		
Right of Way Acquisition	88,241	SF	\$20	\$1,764,820		\$5 for urban areas, \$2 for agricultural, \$20 for relocations
Preliminary Engineering - 10% of Construction				\$2,940,000		
Construction Engineering - 15% of Construction				\$4,410,000		
TOTAL OPTION EB-3 COSTS				\$38,514,820		

Continental - Option 2B**Description:** Roundabouts at each ramp terminal and adjacent frontage road

By: NLB

Conceptual Cost Estimate**DRAFT 06/20/08**

OPTION COSTS						
Item Description	Quantity	Unit	Unit Price	Cost	Cost Extension	Remarks
Quantifiable Items						
Bridge - Precast Concrete Girder	0	SF	\$250	\$0		
Bridge - Steel	0	SF	\$350	\$0		
Asphalt Pavement (8")	6,736	TON	\$80	\$538,880		
Aggregate Base Course (16")	6,804	CY	\$25	\$170,100		
Curb and Gutter	2,400	LF	\$15	\$36,000		
Sidewalk	0	SF	\$50	\$0		
Earthwork	10,205	CY	\$12	\$122,460		
Retaining Walls	0	SF	\$50	\$0		
Overhead Signs	0	EA	\$50,000	\$0		
					\$867,440	
Intersection Improvements						
Minor rework areas	0	LS	\$50,000	\$0		
Major Drainage Items	0	LS	\$25,000	\$0		
Traffic Signal	0	LS	\$250,000	\$0		
					\$0	
Subtotal Section Core Items					\$867,440	
Miscellaneous Items as Percentages						
Removals, Resets & Adjustments			3%		\$26,023	3% for normal roadway removals, 10% if structures
Drainage & Erosion Control			2%		\$17,349	
Landscape			2%		\$17,349	2% for rural, 10% for urban interchanges
Signing, Striping			2%		\$17,349	
Traffic Control			10%		\$86,744	
Mobilization & Misc.			10%		\$86,744	
Total			29%		\$251,558	
Subtotal Section Miscellaneous Items					\$1,118,998	
Contingencies			25%		\$300,000	
CONSTRUCTION COST					\$1,400,000	
TOTAL SECTION PROJECT COST						
Construction Cost				\$1,400,000		
Right of Way Acquisition	0	SF	\$5	\$0		\$5 for urban areas, \$2 for agricultural
Preliminary Engineering - 10% of Construction				\$140,000		
Construction Engineering - 15% of Construction				\$210,000		
TOTAL OPTION C-2 COSTS				\$1,750,000		